

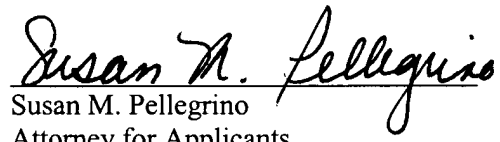
Conclusion

Applicants believe that the subject matter of the pending claims is patentable and that the instant application should accordingly be allowed. If the Examiner believes that a conversation with Applicants' attorney would be helpful in expediting prosecution of this application, the Examiner is invited to call the undersigned attorney at (203) 812-6450.

Respectfully submitted,

Dated: June 16, 2004

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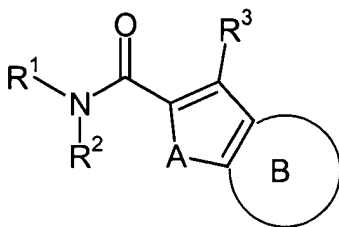
  
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10/500096

DT04 Rec'd PCT/PTO 24 JUN 2004

Amended Claims (Attorney Docket No. LeA 35 821)

1. (Original) A compound of the formula



(I),

in which

R<sup>1</sup> represents 1-azabicyclo[2.2.2]oct-3-yl,

R<sup>2</sup> represents hydrogen or C<sub>1</sub>-C<sub>6</sub>-alkyl,

R<sup>3</sup> represents hydrogen, halogen or C<sub>1</sub>-C<sub>6</sub>-alkyl,

A represents oxygen or sulfur,

and

the ring B represents benzo, pyrido, pyrimido, pyridazo or pyridazino which are optionally substituted by radicals selected from the group consisting of hydrogen, halogen, C<sub>1</sub>-C<sub>6</sub>-alkanoyl, carbamoyl, cyano, trifluoromethyl, trifluoromethoxy, nitro, amino, C<sub>1</sub>-C<sub>6</sub>-acylamino, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino, heteroarylcarbonylamino, arylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylsulfonylamino, di-(C<sub>1</sub>-C<sub>4</sub>-alkylsulfonyl)amino, arylsulfonylamino, di(arylsulfonyl)amino, C<sub>3</sub>-C<sub>6</sub>-cycloalkylcarbonylmethyl, 1,3-dioxapropene-1,3-diyl, amino(hydroxyimino)methyl and benzo,

or a salt, a solvate or a solvate of a salt thereof.

2. (Original) A compound of the formula (I) as claimed in claim 1,

in which

R<sup>1</sup> represents 1-azabicyclo[2.2.2]oct-3-yl,

R<sup>2</sup> represents hydrogen or (C<sub>1</sub>-C<sub>6</sub>)-alkyl,

R<sup>3</sup> represents hydrogen, halogen or (C<sub>1</sub>-C<sub>6</sub>)-alkyl,

A represents oxygen or sulfur,

and

the ring B represents benzo, pyrido, pyrimido, pyridazo or pyridazino which are optionally substituted by radicals selected from the group consisting of hydrogen, halogen, formyl, carbamoyl, cyano, trifluoromethyl, trifluoromethoxy, nitro, amino, formamido, acetamido, (C<sub>1</sub>-C<sub>6</sub>)-alkyl, (C<sub>1</sub>-C<sub>6</sub>)-alkoxy, (C<sub>1</sub>-C<sub>6</sub>)-alkylthio and benzo,

or a salt, a solvate or a solvate of a salt thereof.

3. (Original) A compound of the formula (I) as claimed in claim 1,

in which

R<sup>1</sup> represents 1-azabicyclo[2.2.2]oct-3-yl,

R<sup>2</sup> represents hydrogen,

R<sup>3</sup> represents hydrogen, chlorine, fluorine or methyl,

A represents oxygen or sulfur,

and

the ring B represents benzo or pyrido, where benzo or pyrido is optionally substituted by 1 to 3 radicals selected from the group consisting of hydrogen, halogen, formyl, carbamoyl, cyano, trifluoromethyl, trifluoromethoxy, nitro, amino, formamido, acetamido, C<sub>1</sub>-C<sub>4</sub>-alkyl, C<sub>1</sub>-C<sub>4</sub>-alkoxy, C<sub>1</sub>-C<sub>4</sub>-alkylthio, C<sub>1</sub>-C<sub>4</sub>-alkylamino, furylcarbonylamino, phenylcarbonylamino, methylsulfonylamino, di(phenylsulfonyl)amino, cyclopropylcarbonylmethyl, 1,3-dioxapropane-1,3-diyl, amino(hydroxyimino)methyl and benzo,

or a salt, a solvate or a solvate of a salt thereof.

4. (Original) A compound as claimed in claim 1 of the formula (I), where

R<sup>1</sup> represents (3*R*)-1-azabicyclo[2.2.2]oct-3-yl,

and R<sup>2</sup>, R<sup>3</sup>, A and the ring B are as defined in claim 1.

5. (Original) A compound as claimed in claim 1, of the formula (I), where

R<sup>1</sup> represents (3*R*)-1-azabicyclo[2.2.2]oct-3-yl,

R<sup>2</sup> and R<sup>3</sup> represent hydrogen,

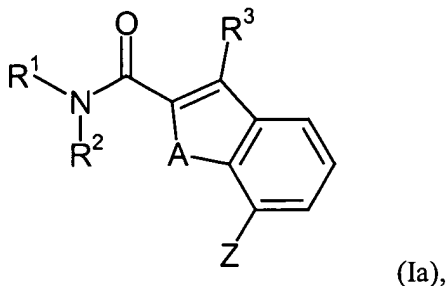
A represents sulfur,

and

the ring B represents benzo or pyrido, where benzo and pyrido are optionally substituted by 1 to 3 radicals selected from the group consisting of hydrogen, halogen, cyano, trifluoromethyl, trifluoromethoxy, nitro, amino, formamido, acetamido and C<sub>1</sub>-C<sub>4</sub>-alkyl,

or a salt, a solvate or a solvate of a salt thereof.

6. (Currently amended) A compound as claimed in claim 1 of the formula (Ia)



in which

R<sup>1</sup> represents 1-azabicyclo[2.2.2]oct-3-yl,

R<sup>2</sup> represents hydrogen or C<sub>1</sub>-C<sub>6</sub>-alkyl,

R<sup>3</sup> represents hydrogen, halogen or C<sub>1</sub>-C<sub>6</sub>-alkyl,

A represents oxygen or sulfur,

and

Z represents hydrogen, halogen, formyl, carbamoyl, cyano, trifluoromethyl, trifluoromethoxy, nitro, amino, formamido, acetamido, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>1</sub>-C<sub>6</sub>-alkoxy, C<sub>1</sub>-C<sub>6</sub>-alkylthio, C<sub>1</sub>-C<sub>6</sub>-alkylamino, heteroarylcarbonylamino, arylcarbonylamino, C<sub>1</sub>-C<sub>4</sub>-alkylsulfonylamino, di(arylsulfonyl)amino, C<sub>3</sub>-C<sub>6</sub>-cycloalkylcarbonylmethyl or amino(hydroxyimino)methyl,

or a salt, a solvate or a solvate of a salt thereof.

7. (Currently amended) A compound as claimed in claim 1 of the formula (Ia),

in which

R<sup>1</sup> represents 1-azabicyclo[2.2.2]oct-3-yl,

R<sup>2</sup> represents hydrogen,

R<sup>3</sup> represents hydrogen, chlorine, fluorine or methyl,

A represents oxygen or sulfur,

and

Z represents hydrogen, halogen, formyl, carbamoyl, cyano, trifluoromethyl, trifluoromethoxy, nitro, amino, formamido, acetamido, methyl, ethyl, methoxy, ethoxy, C<sub>1</sub>-C<sub>4</sub>-alkylamino, furylcarbonylamino, phenylcarbonylamino, methylsulfonylamino, di(phenylsulfonyl)amino, cyclopropylcarbonylmethyl or amino(hydroxyimino)methyl,

or a salt, a solvate or a solvate of a salt thereof.

8. (Currently amended) A compound as claimed in claim 1 of the formula (Ia),  
in which

R<sup>1</sup> represents (3*R*)-1-azabicyclo[2.2.2]oct-3-yl,

R<sup>2</sup> represents hydrogen,

R<sup>3</sup> represents hydrogen, chlorine, fluorine or methyl,

A represents oxygen or sulfur,

and

Z represents hydrogen, halogen, formyl, carbamoyl, cyano, trifluoromethyl, trifluoromethoxy, nitro, amino, formamido, acetamido, methyl, ethyl, methoxy, ethoxy, C<sub>1</sub>-C<sub>4</sub>-alkylamino, furylcarbonylamino, phenylcarbonylamino, methylsulfonylamino, di(phenylsulfonyl)amino, cyclopropylcarbonylmethyl or amino(hydroxyimino)methyl,

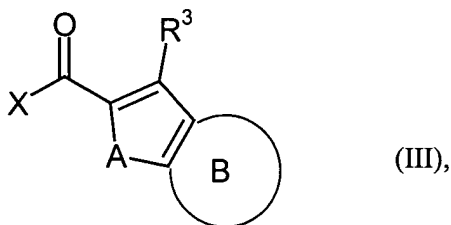
or a salt, a solvate or a solvate of a salt thereof.

9. (Original) A process for preparing compounds of the formula (I) as claimed in claim 1, characterized in that compounds of the formula



in which  $R^1$  and  $R^2$  are as defined in claim 1

are reacted with a compound of the formula



in which

$R^3$ , A and the ring B are as defined in claim 1 and

X represents hydroxy or a suitable leaving group,

in an inert solvent, if appropriate in the presence of a condensing agent and if appropriate in the presence of a base.

10. (Cancelled).
11. (Original) A medicament comprising at least one of the compounds as claimed in any of claims 1 to 8 in a mixture with at least one pharmaceutically acceptable, essentially nontoxic carrier or excipient.

12. (Currently amended) ~~The use of compounds as claimed in any of claims 1 to 8 for preparing a medicament~~ A method for improving perception, concentration, learning and/or memory comprising the step of administering to a human or animal an effective amount of a compound as claimed in claims 1 to 8.
13. (Cancelled).
14. (Cancelled).
15. (Currently amended) A method for the treatment of ~~controlling in~~ impairments of perception, concentration, learning and/or memory comprising the step of administering to a humans or animals ~~by administering~~ an effective amount of a compound as claimed in claims 1 to 8.